A study to assess the effects of digital addiction on psychosocial behaviour of adolescents at selected schools of punjab

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DECLARATION

I declare that the Synopsis entitled ***A Study to assess the effects of digital addiction on psychosocial behaviour of adolescents at selected schools of Punjab*** has been prepared by me under the guidance of Dr. Rajwant Kaur Randhawa, Desh Bhagat University. No part of this synopsis has formed the basis for the award of any degree previously.

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TABLE OF CONTENT

Sr. No	Content	Page Number
a.	Introduction	1-2
b.	Statement of the Problem	2
c.	Literature Review	2-4
d.	Gaps in research	4-5
e.	Needs of the study	5-6
f.	Objectives	6
g.	Scope	6
h.	Delimitation of study	6-7
i.	Research questions	7
j.	Research Hypothesis	7
k.	Research Design	7
1.	Research methodology	7
2.	Area of study	7
3.	Sample	7
4.	Techniques	7
5.	Tools	7
6.	Measurement and scaling	7
7.	Data processing	7
8.	Analysis and estimation	7
9.	Testing hypothesis	8
10.	Expected outcomes	8
11.	Relevance of Expected Results	8
12.	Time lines	8
13.	Tentative Chapter plan	8
14.	References/bibliography	8-10

a. INTRODUCTION

"I fear the day that technology will surpass our human interaction. The world will have a generation of idiots." *Albert Einstein*

The Internet and mobile technology are increasingly important to the educational and social lives of adolescents and becoming a part of their identity. With the advent of broadband and mobile access to the internet giving young people access to the internet any place and at any time, and thus 24/7 entertainment, interaction and communication there is a real risk that adolescents can become so immersed in their online world that it seems to take over their lives. It is easy to see the young people spending many hours pursuing their interests, playing games, finding information and communicating with friends and strangers online. However, when this use becomes obsessive and at the expense of other aspects of a young person's life, this use of the internet could be problematic and could even be classified as digital addiction.[1]

The demands of modern lifestyles have also lead to heavy dependence on various digital technologies for information, inter-personal relationships, entertainment and even economic transactions. There is no doubt that the over dependence on digital technology may result in addiction. Digital addiction is similar to other addictions; those suffering from it exhibit compulsive behaviour and use the virtual fantasy world as a substitution for real-life human connection.[2]

Digital addiction is defined by the American Society for Addiction Medicine as well as the American Psychiatric Association as "a primary, chronic disease of brain reward, motivation, memory, and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors" with examples such a such as internet gaming or similar behaviors. Symptoms of digital addiction such as increased loneliness (also called "phoneliness"), anxiety, and depression and "iNeck" (poor) posture.[3]

Digital addiction which includes Social Networks addiction, online/offline gaming addiction, etc., includes the excessive, compulsive, impulsive and even hasty usage of software and computing devices. In contrast to traditional addictions, such as

alcohol addiction, Digital addiction can exhibit similar symptoms, such as mood modification, salience, tolerance, withdrawal, conflict and relapse. Although some types of Digital addiction, e.g. those to social networks, are still subject to research whether they are formally a sort of addition as stated in the Diagnostic and Statistical Manual of Mental Disorders, (DSM-5), such usage is becoming practically a serious issue. Cheng and Li suggest that 6% of the world's population has Internet Addiction.[4]

World Health organization identified a list of potential physical and social consequences of excessive use of the internet, computers, smartphones and other electronic devices. Impacts on physical health include increasingly sedentary lifestyles (linked to increased obesity), damage to vision and hearing, accidents caused by lack of concentration and musculoskeletal problems associated with sitting or lying in the same position too much. Psychosocial health impacts identified included exposure to cyber-bullying, poor social development, sleep deprivation, risky sexual behaviour, aggressive behaviour; plus, a whole range of other social and psychological problems such as poor psychological well-being, poor self-confidence, family problems, marital breakdown, reduced work and academic performance.[5]

b. STATEMENT OF THE PROBLEM: A study to assess the effects of digital addiction on psychosocial behaviour of adolescents at selected schools of Punjab

c. LITERATURE REVIEW: Good research does not exist in vacuum. Research findings should be an extension of previous knowledge and theory as well as guide for further research activity. In-order for a researcher to build an existing work, it is essential to understand what is already known.

Literature related to prevalence of digital addiction

Study was designed to estimate prevalence of technology addiction & dependency on them and to find the associated health problems among those addicted. A cross-sectional study was conducted among 102 under-graduate medical students of Gulbarga Institute of medical sciences, Kalaburagi. A structured e-questionnaire designed with Google forms was deployed to collect data. Over 60 % of the study subjects spent more than 7 hour/day with some technological devices and 49 % of the subjects showed high degree of dependency on technology. Among addicted subjects feeling anxious/nervous

was the commonest symptom reported, followed by feeling sad/depressed. Prevalence of technology addiction was high among medical students and subjects engaged for more than 7 hours/day with technological devices, reported health problems in higher proportion.[6]

A cross sectional survey design was used for 52 randomly selected adolescents from private school of Haridwar, Uttarakhand. Data was collected through Kimberly Young's internet addiction scale. Result showed that more than half participants were using facebook (71%) and whats app (71%) for the purposes of chatting 92%, regarding internet addiction more than half (53.8%) of the participants had moderate internet addiction and 7.7% had severe internet addiction which could possibly affect the physical and mental health of the youngsters.[7]

A cross-sectional study comprising of 1150 students of various streams in 3 different colleges of Lucknow was conducted students were assessed by a self-administered semi-structured proforma and The internet addiction test (IAT; Young, 1998) after giving them brief instructions. 1150 adolescents took part in the study, 805 (70%) were male and 345 (30%) were females. The mean age of subjects was 15.46 years. Of the total, about 74.5% were potential addicts. According to Young's original criteria, 0.7% was found to be definite addicts. Subjects with excessive use of internet also had problems of anxiety, depression, and anxiety depression.[8]

Literature related to effect of digital addiction on psychosocial behaviour

Research shows that teenagers with Internet addiction experience lower quality in their relationships with parents and more individual difficulties. We evaluated in a large community sample of adolescents (N=1105) the Internet use/abuse, the adolescents' attachment to parents and peers, and their psychological profiles. Hierarchical regression analyses were conducted to verify the influence of parental and peer attachment on Internet use/abuse, considering the moderating effect of adolescents' psychopathological risk. Results showed that adolescents' attachment to parents had a significant effect on Internet use. Adolescents' psychopathological risk had a moderating effect on the relationship between attachment to mothers and Internet use. Study shows that further research is needed, taking into account both individual and family variables.[9]

A quantitative design was used to assess effects of excessive digital media use or overuse on the health of children, primarily utilizing. Focus groups and interviews were conducted with children between the ages of 9 and 16 in 9 European countries (N = 368). Children reported several physical and mental health problems without indicating internet addiction or overuse included eye problems, headaches, not eating, and tiredness. For mental health symptoms, children reported cognitive salience of online events, aggression, and sleeping problems. Sometimes they reported these problems within 30 min of technology usage. This suggests that even shorter time usage can cause self-reported health problems for some children.[10]

A cross sectional study was conducted among 885 school students in north India. Four schools were selected and participants aged 13-18 years, were enrolled randomly. A self-designed 45 item questionnaire was used to evaluate dependence syndrome. Screening for depression and anxiety was done by using patient health questionnaire (PHQ-9) and generalized anxiety disorder scale (GAD-7) respectively. Among the participants 30.3% (95% Confidence Interval = 27.2%-33.3%) met the dependence criteria. One-third (33%) of the students stated that their grades had gone down due to gadget use. Technology addiction was more among male students (odds ratio = 2.82, 95% CI = 1.43, 5.59), those having a personal mobile phone (2.98, (1.52-5.83), use smart phone (2.77, 1.46-5.26), use one additional gadget (2.12, 1.14-3.94) and those who were depressed (3.64, 2.04-6.49).[11]

d. GAPS IN RESEARCH: There are a number of research work related to this study area conducted basically in western countries and the countries having a developed society. Comparatively fewer studies are being conducted in the developing countries like India related to this area of study and those fewer studies are even conducted in the metro cities. This study will be an additional knowledge in the respective field of research for the upcoming researcher. It will provide important information regarding the students to the educational institutes like schools and will help them in formulating their policies regarding the controlled use of digital gadgets of the students. It may also help students to understand the impacts of the addiction to the digital-gadgets and services and make them aware about the control of the use of the devices.

e. NEED FOR THE STUDY

Number of internet users in India has registered an annual growth of 18 percent and is estimated at 566 million as of December 2018, a 40 percent overall internet penetration. It projected a double digit growth for 2019 and estimates that the number of internet users will reach 627 million by the end of this year. Of the total user base, 87 percent or 493 million Indians are defined as regular users. Nearly 293 million active internet users reside in urban India, while there are 200 million active users in rural India. The report found that 97 percent of users use mobile phone as one of the devices to access internet. While internet users grew by 7 percent in urban India, reaching 315 million users in 2018 and digital adoption is now being propelled by rural India, registering a 35 percent growth in internet users over the past year. It is now estimated that there are 251 million internet users in rural India, and this is expected to reach 290 million by the end of 2019.[12]

Digital technologies have profoundly changed childhood and adolescence. The internet and the means to access it, such as tablets and smartphones, along with social media platforms and messaging apps, have become integral to the lives of youth around the world. They have transformed their education and learning, the way they make and maintain friendships, how they spend their leisure time, and their engagement with wider society. UNICEF's state of the world's children 2017, children in a digital world report reveals that one in three internet users is younger than 18 years and 71% of 15–24-yearolds are online, making them the most connected age group worldwide.[13]

Addiction to technology is causing significant loss of productivity as well as problems in interpersonal relationships. The internet has paved the way for the waves of globalisation to spread its claws into the smallest households of the country. It is high time now to formulate a comprehensive approach to curb the unrestricted use of the internet and digital devices. Such slavery for gadgets is indeed worrisome. Over-use of mobile phones can affect social and psychological well-being and health of adolescents. Hence, the present study is aimed to evaluate the effect of digital addiction on psychosocial behaviour and entitled as "effect of digital addiction on psychosocial behaviour among adolescents"[14]

f. OBJECTIVES

i. To assess the level of digital addiction among adolescents.

ii. To assess the psychosocial behaviour among adolescents with digital addiction.

iii. To find out the correlation between digital addiction and psychosocial behaviour

iv. To find out the association between digital addiction and selected demographic variables such as Age, gender, education, religion, family monthly income, type of family, birth order, recreational activity and area of living.

v. To find out the association between psychosocial behaviour and selected demographic variables such as Age, gender, education, religion, family monthly income, type of family, birth order, recreational activity and area of living.

g. SCOPE: The scope of the present study pertains to evaluate the effect of digital addiction on psychosocial behaviour of adolescents who are studying in various schools around Punjab.

h. DELIMITATION OF STUDY

i. The study will be limited to adolescents studying in selected schools of Punjab

ii. The study will be limited to adolescents who are using digital devise daily.

iii. The study will be limited to adolescents who are present at the time of data collection.

i. RESEARCH QUESTION

What effect does digital addiction have on psychosocial behaviour among adolescents?

j. RESEARCH HYPOTHESIS

H1: There will be significant relationship between the level of digital addiction and psychosocial behaviour among adolescents

H2: There will be significant association between the level of digital addiction and selected demographic variables among adolescents

k. RESEARCH DESIGN : A descriptive correlational research design will be used

1. **Research methodology:** Study is based upon the intensive fieldwork will be conducted in selected schools. Quantitative methods will be used for the analysis of the data. Descriptive and inferential statistics will be used for the data analysis.
2. **Area of study:** Study will be conducted in selected schools of Punjab

3. **Sample**: sample size will be 500 adolescents those who will be studying in selected Schools of Punjab.
4. **Techniques:** Purposive sampling technique will be used
5. **Tools:** After careful and detailed review of literature the researcher will prepare and develop Digital addiction test, DAS (Depression anxiety Stress) Scale, UCLA (University of California, Los Angeles) Loneliness scale and Modified PSQI (Pittsburgh Sleep Quality Index) Scale will be used as tool for the present study.
6. **Measurement and scaling:** The tool comprised of five sections namely section-I demographic variables, section-II Digital Addiction Test, section-III DAS Scale, section-IV UCLA Loneliness Scale and section-V modified PSQI Scale.
7. **Data processing:** Data will be processed and analyzed with editing, coding, classification and tabulation
8. **Analysis and estimation:** the data collected from the subjects will analyze using descriptive and inferential statistics.
9. **Testing hypothesis:** Hypothesis testing will be done by necessary computation
10. **Expected outcomes:** Adolescents use digital devices excessively for the entertainment and social networking. Digital addiction adolescents may have psychosocial problems due to over usage of digital devices
11. **Relevancy of expected results:** There will be significant relationship between the digital addiction and psychosocial behaviour among adolescents and association of research variables with selected demographic variables
12. **Time lines:** Pre submission of thesis will be between 22 to 24 months after the date of registration.
13. **Tentative Chapter plan:** Background of the study, Review of literature, Methodology, Analysis and interpretation, Discussion, Summary, Implications, and Recommendation, References and Bibliography

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